CLAIMS

I claim:

1. A data entry device comprising:

a key having a first data entry value associated with depressing the key;

the key having one or more additional discrete data entry values associated with deflecting the key in a predetermined direction;

the key having a user readable indication of each of the one or more additional discrete data entry values; and

where the key is adapted for being depressed or deflected by a human fingertip.

2. The data entry device of claim 1 wherein the first data entry value is a numeric data value and the one or more additional discrete data entry values are alphabetic data values.

3. The data entry device of claim 1 wherein the one or more additional discrete data entry values are each associated with a predetermined zone around a periphery of the key.

4. The data entry device of claim 1 wherein the one or more additional discrete data entry values are each associated with an adjustable zone around a periphery of the key.

5. The data entry device of claim 4 further comprising a controllable display around the periphery of the key.

6. The data entry device of claim 5 wherein the controllable display is an LCD.

7. The data entry device of claim 3 wherein the number of predetermined zones is user selectable.

8. The data entry device of claim 1 wherein the key is square in shape and the number of predetermined directions are four.

9. The data entry device of claim 1 wherein the key is circular in shape and the number of predetermined directions are four, six, or eight.

10. The data entry device of claim 1 wherein the key is hexagonal in shape and the number of predetermined directions are six.

11. The data entry device of claim 1 wherein the key is octagonal in shape and the number of predetermined directions are eight.

12. A data entry device comprising:

a plurality of keys, each key having a first data entry value associated with depressing the key; and

each key having one or more additional discrete data entry values associated with deflecting the key in a predetermined direction.

13. The data entry device of claim 12 wherein the plurality of keys is a 12-key telephone numeric keypad, and the additional discrete data entry values are alphabetic data values.

14. The data entry device of claim 12 wherein the plurality of keys is a three-key watch keypad, and the additional discrete data entry values are numeric data values.

15. The data entry device of claim 12 wherein the plurality of keys is a three-key handheld computer keypad, and the additional discrete data entry values are representative of a QWERTY keyboard.

16. A system for entering data comprising:

one or more keys, each key having three or more states; and

a key controller system receiving state data for each key and translating the state data into a data value.

17. The system of claim 16 further comprising a zone identification system receiving zone data from each key and generating state data from the zone data.

18. The system of claim 16 further comprising a sequence identification system receiving state data and sequence data from one or more keys and translating the state data and sequence data into the data value.

19. The system of claim 16 further comprising a soft key generation system generating user-readable display data associated with one or more of the keys.

20. The system of claim 16 further comprising a soft key identification system translating the data value based on soft key definition data.